The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 20

# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte BRYAN PATRICK LIVENGOOD, GEORGE P. MARSHALL and JOHN MELVIN OLSON

# MAILED

NOV 2:4 2003

U.S. PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES Appeal No. 2003-2157 Application No. 09/885,311

ON BRIEF

Before WALTZ, TIMM, and JEFFREY T. SMITH, Administrative Patent Judges.

WALTZ, Administrative Patent Judge.

## DECISION ON APPEAL

This is a decision on an appeal from the primary examiner's final rejection of claims 1, 3 through 8, 10 through 19, 21 and 22. Claims 9 and 20 have been withdrawn from this appeal (Brief, pages 1 and 5; Answer, page 2). Claim 30 is the only other claim

<sup>&</sup>lt;sup>1</sup>Appellants filed an amendment subsequent to the final rejection but this amendment was refused entry by the examiner (see the amendment dated Apr. 23, 2003, Paper No. 12, the Advisory Action dated May 2, 2003, Paper No. 13, and the Brief, page 2).

Application No. 09/885,311

pending in this application and stands allowed (Brief, pages 1 and 5; Answer, page 2). We have jurisdiction pursuant to 35 U.S.C. § 134.

According to appellants, the invention is directed to a toner comprising a blend of binder resin, coloring matter, a charge control agent, and wax which functions to facilitate clean release of toner from a hot fuser member (Brief, page 2). Appellants' invention is employing random copolymers as a compatibilizer to reduce the separation between the wax and the resin (Brief, page 3).

Appellants state that the claims stand or fall together (Brief, page 5). Accordingly, we select one claim from each ground of rejection and decide this appeal on the basis of these claims alone. See 37 CFR § 1.192(c)(7)(2000); and In re McDaniel, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002). Representative independent claim 1 is reproduced below:

- 1. A toner composition comprising:
- a) a primary resin having a polymeric structure comprising at least one distinct repeating structural unit;
- b) at least one wax release agent having a polymeric structure comprising at least one distinct repeating structural unit; and

c) a secondary resin at least partially compatibalizing [sic] said primary resin and said wax consisting of a random copolymer, wherein the structure of said random copolymer has at least one repeating structural unit compatible with at least one distinct repeating structural unit of said primary resin and at least one other repeating structural unit which is compatible with a [sic, at] least one distinct repeating structural unit of said wax release agent.

The examiner has relied upon the following references as evidence in support of the rejections on appeal:

Crystal	4,027,048	May 31, 1977
Mahabadi et al. (Mahabadi)	5,364,724	Nov. 15, 1994
Katada et al. (Katada)	5,972,553	Oct. 26, 1999
Sato et al. (Sato)	5,985,501	Nov. 16, 1999

Claims 1, 3-8, 10, 12 and 22 stand rejected under 35 U.S.C. § 102(b) as anticipated by Crystal (Answer, page 4). Claims 1, 3-8, 10, 12-18, 21 and 22 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Crystal in view of Katada and Sato (Answer, page 5). Claims 11 and 19 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Crystal in view of Katada, Sato and Mahabadi (Answer, page 6). We affirm all of the rejections on appeal essentially for the reasons stated in the Answer and those reasons set forth below.

 $<sup>^2</sup>$ The final rejection of claims 1, 3-9, 11, 12, 14, 21 and 22 under 35 U.S.C. § 102(b) over Lin has been withdrawn by the examiner (Answer, page 2,  $\P(3)$ ).

#### OPINION .

# A. The Rejection over Crystal

As discussed above, the claims stand or fall together for this ground of rejection. Thus, we limit our consideration to claim 1 on appeal in deciding this ground of rejection. See 37 CFR \$ 1.192(c)(7)(2000).

The examiner finds that Crystal discloses a toner comprising two incompatible polymers, one being a "tough" polymer that serves as a matrix and corresponds to the primary resin of appealed claim 1, and the second polymer being a "soft" polymer present as a plurality of discrete domains inside the matrix that includes polyolefin waxes corresponding to the release agents as recited in appealed claim 1 (Answer, pages 4-5). The examiner also finds that Crystal teaches the use of a compatibilizer (i.e., a dispersing agent) to improve dispersion of the domain in the matrix, with one component of the compatibilizer being compatible with the matrix polymer and another component being compatible with the domain polymer (Answer, page 4). Finally, the examiner finds that Crystal specifically discloses that a "shaded random" copolymer, a type of random copolymer, is effective as a compatibilizer (id.).

Appellants do not contest any of the examiner's factual findings (see the Brief in its entirety). The sole issue with

respect to this ground of rejection is whether the examiner's rejection is based on an erroneous interpretation of the claimed subject matter (Brief, page 6). For reasons which follow, we agree with the examiner's claim interpretation.

The examiner and appellants discuss the effect of the amendments to the specification which were made in the response dated Feb. 24, 2003, Paper No. 10 (Brief, pages 3-6; Answer, pages 2-3). However, as noted by the examiner (Answer, pages 2-3), the specification has been objected to under 35 U.S.C. § 132 as containing "new matter" and this action is petitionable, not appealable. See *In re Rasmussen*, 650 F.2d 1212, 1214-15, 211 USPQ 323, 325-26 (CCPA 1981); MPEP § 706.03(o) and § 1002.02(c), 8<sup>th</sup> ed., Rev. 1, Feb. 2003. We must consider the record as it stands on appeal, including the specification as amended.

During prosecution before the Office, the claim language must be given its broadest reasonable interpretation as commonly used, when read in light of the specification as it would have been understood by one of ordinary skill in the art. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). The sole contested language is "random copolymer" as recited in claim 1 on appeal (Brief, page 5). The specification, as amended at page 12, 11. 1-16, teaches that "[r]andom copolymers are comprised of

segments of A and segments of B monomer occurring along the polymer chain, the segments containing a random number of repeat units with each occurrence." The specification, as amended at page 14, 1.22page 15, 1. 21, teaches that a random copolymer may have "segments resembling a 'pure block' or a 'pure alternating' copolymer" depending upon the conditions under which it was polymerized, contributing to the "blocky" or "alternating" character of the random copolymer. Contrary to appellants' interpretation (Brief, page 3), these definitions and guidelines in the specification do not limit the term "random copolymer" to a "classic random copolymer" (Brief, page 3) or a "true random" copolymer (Brief, page 7). Giving the term "random copolymer" its broadest reasonable interpretation as read in light of the specification and as understood by those of ordinary skill in the art (including Crystal), we interpret this contested language to include any random copolymer, including types with "blocky" or "alternating" character or higher concentration of one component at either end of the copolymer.

In view of our claim interpretation, appellants' arguments regarding claim construction are not persuasive (Brief, pages 5-6). Similarly, appellants' argument that Crystal is not "pertinent" since the "shaded copolymer" of Crystal could not be suggestive of

Application No. 09/885,311

"true random" copolymers is not persuasive (Brief, page 7). True random copolymers are not recited in claim 1 on appeal, nor is the claimed term "random copolymer" interpreted as limited to true random copolymers.

Appellants argue that "consisting of" as recited in claim 1 on appeal negates any implication that the term "random" means anything but truly random (Brief, page 7). This argument is not well taken since the term "consisting of" only modifies or limits the term "secondary resin," limiting this resin to only a random copolymer but not placing any limits on the random copolymer per se.

For the foregoing reasons and those set forth in the Answer, we affirm the examiner's rejection of claim 1, and claims 3-8, 10, 12 and 22 which stand or fall with claim 1, under section 102(b) over Crystal.

## B. The Remaining Rejections

With respect to the rejections over Crystal in view of Katada, Sato and Mahabadi, appellants only argue that these secondary references do not supply the deficiencies found in Crystal (Brief, page 8). Accordingly, we adopt our discussion above regarding Crystal, as well as the examiner's findings of fact and conclusions of law with respect to Katada, Sato and Mahabadi.

#### C. Other Issues

As discussed above, the examiner has objected to the specification under section 132 as containing new matter. However, in the event of further or continuing prosecution of this application and continued objection to the specification as containing new matter, the examiner should consider the patentability of the claimed subject matter under the first paragraph of 35 U.S.C. § 112, since the claims as construed do not find written description in the originally filed specification.

See In re Rasmussen, supra, and MPEP § 2163.06, I, 8th ed., Feb. 2003.

# D. Summary

The rejection of claims 1, 3-8, 10, 12 and 22 under 35 U.S.C. § 102(b) over Crystal is affirmed. The rejection of claims 1, 3-8, 10, 12-18, 21 and 22 under 35 U.S.C. § 103(a) over Crystal in view of Katada and Sato is affirmed. The rejection of claims 11 and 19 under 35 U.S.C. § 103(a) over Crystal in view of Katada, Sato and Mahabadi is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR \$ 1.136(a).

## **AFFIRMED**

THOMAS A. WALTZ

Administrative Patent Judge

CATHERINE TIMM

Administrative Patent Judge

BOARD OF PATENT APPEALS AND

INTERFERENCES

JEFFREY T. SMITH

Administrative Patent Judge

TAW/jrg

LEXMARK INTERNATIONAL, INC.
INTELLECTUAL PROPERTY LAW DEPARTMENT
740 WEST NEW CIRCLE ROAD
BLDG. 082-1
LEXINGTON, KY 40550-0999